

### **AMENDMENTS TO THE ABSTRACT**

Please substitute the following paragraph(s) for the abstract now appearing in the currently filed specification:

A temporary model generating unit generates a probability model which is estimated to generate a text document as a processing target and in which information indicating which word of the text document to which topic is made to correspond to a latent variable, and each word is made to correspond to an observable variable. A model parameter estimating unit estimates model parameters defining a probability model on the basis of the text document as the processing target. When a plurality of probability models are generated, a model selecting unit selects an optimal probability model on the basis of the estimation result for each probability model. A text segmentation result output unit segments the text document as the processing target for each topic on the basis of the estimation result on the optimal probability model.